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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,849	08/22/2003	Youichi Yamada	031050	8142

23850 7590 02/08/2007
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EXAMINER

DANIELSEN, NATHAN ANDREW

ART UNIT	PAPER NUMBER
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2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/645,849

Applicant(s)

YAMADA ET AL.

Examiner

Nathan Danielsen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,6,8,10,12-15,17,18,20,21 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5,7,9,11,16,19,22 and 24-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 22 August 2003 and 29 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/23/06
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-29 are pending. Claims 2, 4, 6, 8, 10, 12-15, 17, 18, 20, 21, and 23 are withdrawn in response to applicant's election filed 20 November 2006.

Election/Restrictions

2. Claims 2, 4, 6, 8, 10, 12-15, 17, 18, 20, 21, and 23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 20 November 2006.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

4. Claim 1 is objected to because "the processing for changing a processing position" should be --the processing details for changing a processing position--. Claim 11 is objected to because the phrase "is divided to several blocks" should be --is divided into several blocks--. Appropriate correction is required. Further, the examiner respectfully requests that applicant carefully review the claims to determine and correct any other informalities that may be found therein.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 3, 5, 7, 9, 11, 16, 19, 22, and 24-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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a. Claim 1 recites the limitation "the processing details". Claim 3 recites the limitations "the processing start position" and "the same position". Claim 9 recites the limitation "the processing start position". Claim 16 recites the limitation "the rotating direction". Claims 22 and 24 recite the limitations "the processing for starting or stopping processing of said information" and "the processing for changing a processing position of said information". Claim 24 further recites the limitation "the processing state". Claim 26 recites the limitation "the program". Claim 29 recites the limitations "the music data", "the data", "the state", and "the rotating direction". There is insufficient antecedent basis for these limitations in the claims.

b. Claim 5 recites the limitation "an instruction for a processing start position". It is unclear if applicant intends to claim multiple processing start positions and multiple instructions for processing start positions (see claim 3), or if applicant intends to claim only a single processing start position and a single instruction for the single processing start position, or some combination thereof. Further, it is unclear if applicant intends to claim multiple processing positions, or a single processing position (see claim 3). Claim 9 recites "a pressing operation or a touching operation" in two locations. It is unclear if applicant intends to claim two separate pressing operations and two separate touching operations, or only one of each. Claim 19 recites the limitation "a position for processing by the information processing section". It is unclear if applicant intends to claim multiple processing positions (see claim 1) or a single processing position. Claim 26 recites the limitation "a recording medium". It is unclear if applicant intends to claim multiple recording media (see claim 24) or a single recording medium. Claim 28 recites the limitations "a recording medium", "a change instruction", "a processing position", "a position for processing", "a pressing operation" (second instance), "a touching operation" (second instance), and "an rotating operation" (second instance). It is unclear if applicant intends to claim multiple recording media, change instructions, etc., or a single recording medium, change instruction, etc. Claim 29 recites the limitations "a change instruction", "a pressing operation" (second instance), "a touching operation" (second instance), and "a rotating operation" (second instance). It is unclear if applicant intends to claim multiple change instruction, pressing operations, and

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touching operations or a single change instruction, pressing operation, touching operation, and rotating operation.

c. The term "several" in claim 11 is a relative term which renders the claim indefinite. The term "several" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The term "several" renders the claim indefinite because it is unclear exactly how many blocks the change instruction recognizing section is divided into.

d. Claims 7, 25, and 27 are rejected as being dependent on an indefinite base claim.

Claim Rejections - 35 USC § 101

7. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 25 is drawn to a "program" per se, as recited in the preamble and as such is non-statutory subject matter (see MPEP § 2106(IV)(B)(1)(a)). Data structures not claimed as embodied in tangible computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed tangible computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and

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functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be realized.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 3, 5, 7, 16, 19, 22, and 24-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Inoue et al (US Patent Application Publication 2001/0017821; hereinafter Inoue).

Regarding claims 1, 22, and 24-26, Inoue discloses an information processing unit (and corresponding method) comprising:

a reading section for reading information recorded in a recording medium (element 10 in figure 1);

an information processing section for processing the information read by the reading section

(DSP 14);

a change instruction recognizing section for recognizing an instruction for changing a processing state of said information in the information processing section (DSP 14 performing the method of figures 7-9);

a change condition selecting section for selecting at least either one of the processing details for starting or stopping the processing of the information or the processing for changing a processing position of said information (DSP 14 performing the method of figures 7-9; where the starting/stopping of the jog dial is detected and information is processed differently when the jog dial is moving than when it is not); and

a processing control section for changing, when the instruction for changing the information processing state is recognized by said change instruction recognizing section, the

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processing state in said information processing section according to the processing details selected in said change condition selecting section (DSP 14 performing the method of figures 7-9; where the starting/stopping of the jog dial is detected and information is processed differently when the jog dial is moving than when it is not).

Further regarding claims 25 and 26, the computer program and recording medium for storing the computer program is inherent in DSP 14.

Regarding claim 3, Inoue discloses where the information processing unit further comprises: a positional instruction recognizing section for recognizing an instruction for the processing start position to have the information processed at the same position again, wherein said processing control section changes a processing position of said information processing section to the processing start position according to the instruction recognized by said positional instruction recognizing section (DSP 14 performing the method of figures 7-9; where, when the jog dial is rotated, no additional data is reproduced from CD reproduction unit 10 in figure 1 for further processing).

Regarding claim 5, Inoue discloses where the information recorded in the recording medium includes data and positional information concerning a position of the data (inherent in recording media for proper interpretation of the data contained thereon), said information processing unit further comprising:

a position recording section for recording, when an instruction for a processing start position (current position when jog dial starts to rotate (step S)) is recognized by the positional instruction recognizing section, said processing start position and information preceding and following said processing start position (step S102 in figure 7);

wherein said processing control section changes a processing position in said information processing section to the processing start position according to said positional information recorded in said position recording section (inherent in figures 7-9 since 11 seconds of data are always stored in the memory, whether the jog dial is rotating or not (¶ 44)).

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Regarding claim 7, Inoue discloses where the processing control section makes, when the processing position in the information processing section is changed to the processing start position, said information processing section process the data for the information recorded in the position recording section (inherent in figures 7-9 since the data is processed from the start position at all times).

Regarding claim 16, Inoue discloses where said change instruction recognizing section is rotatably provided to detect the rotating direction, and said processing control section moves a position for processing by the information processing unit forward or backward according to the rotating direction detected by said change instruction recognizing section (figure 8).

Regarding claim 19, Inoue discloses where the information processing unit according further comprises:

a read control section for controlling operations of the reading section, wherein said read control section makes, when a position for processing by the information processing section is changed by the processing control section, the reading section read information near said changed processing position (figure 9).

Regarding claim 27, Inoue discloses a reproducing unit comprising the information processing unit according to claim 1, and a reproducing section for fetching and reproducing the information processed by the information processing unit (elements 18, 20, 22, 26, 28, and 30 in figure 1).

Regarding claim 29, Inoue discloses a reproducing unit comprising:

the information processing unit according to claim 22 (see above); and

a reproducing section for fetching and reproducing the information processed by the information processing unit (elements 18, 20, 22, 26, 28, and 30 in figure 1), wherein the change instruction recognizing section of said information processing unit is a rotating body (jog dial 83 in figure 4) which is rotatably provided and detects a rotating operation, a pressing operation, or a touching operation to the rotating body to recognize a change instruction for changing the processing position to process the music data so that the data can be reproduced (DSP 14 performing the method of figures 7-9); and

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the processing control section of said information processing unit changes the position for processing by the information processing section in the information processing unit to a previously stored position when a state shift from the not-pressed state to the pressed state or that from the not-touched to the touched-state is detected by said change instruction recognizing section, and further moves the position for processing by said information processing section, when a pressing operation or a touching operation is detected by said change instruction recognizing section and further a rotating operation is detected in the state, forward or backward in the rotating direction (DSP 14 performing the method of figures 7-9; note that the various operations are listed in the alternative, and thus since jog dial 83 rotates and the method of figures 7-9 changes the processing state depending on the rotational state of the jog, this rotational state meets the touched/not-touched and pressed/not-pressed limitations).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9, 11, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue, in view of Liu (US Patent 6,618,329).

Regarding claim 9, Inoue discloses everything claimed, as applied to claim 1. However, Inoue fails to disclose where a pressing or touching operation is a trigger for the processing control section to alter its current processing.

In the same field of endeavor, Liu discloses where said change instruction recognizing section determines whether a pressing operation or a touching operation has been performed or not, and said processing control section makes the information processing section change the processing state of the

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information or move the processing position of the information to the processing start position when said change instruction recognizing section determines that a pressing operation or a touching operation has been performed (col. 3, lines 9-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a touching or pressing operation to change the state of a processing apparatus, as taught by Liu, for the purpose of allowing a user to decide on the item of musical data to be played as well as the speed and the direction of the playback (col. 3, lines 25-34).

Regarding claim 11, Inoue, in view of Liu, discloses everything claimed, as applied to claim 9. Additionally, Inoue discloses where said change instruction recognizing section is divided to several blocks (figure 4), and said processing control section changes, when it is determined in said change instruction recognizing section that a specific block has been pressed or touched, a processing position in said information processing section based on the processing start position corresponding to said specific block (DSP 14 performing the method of figures 7-9).

Regarding claim 28, Inoue discloses everything claimed, as applied to claim 27. Additionally, Inoue discloses where said information processing section processes music data recorded in a recording medium for reproducing the music data (¶ 4);

said change instruction recognizing section is a rotating body (element 83 in figure 4) which is rotatably provided and detects a rotating operation to this rotating body to recognize a change instruction for changing a processing position to process the music data so that the music data can be reproduced (DSP 14 performing the method of figures 7-9);

said processing control section changes the position for processing by said information processing section forward or backward in response to an rotating operation detected by said change instruction recognizing section (DSP 14 performing the method of figures 7-9); and

a reproducing section outputs the information processed by said information processing section as voices and sounds (elements 18, 20, 22, 26, 28, and 30 in figure 1).

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However, Inoue fails to disclose where the rotating body also detects a pressing operation and a touching operation and where said processing control section changes a position for processing by said information processing section to a previously stored position in response to a pressing operation or a touching operation detected by said change instruction recognizing section.

In the same field of endeavor, Liu discloses where the rotating body also detects a pressing operation and a touching operation and where said processing control section changes a position for processing by said information processing section to a previously stored position in response to a pressing operation or a touching operation detected by said change instruction recognizing section (col. 3, lines 9-41).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized a touching or pressing operation to change the state of a processing apparatus, as taught by Liu, for the purpose of allowing a user to decide on the item of musical data to be played as well as the speed and the direction of the playback (col. 3, lines 25-34).

Citation of Relevant Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - a. Miller et al (US Patent Application Publication 2002/0046315) disclose a portable media player with cuing, and forward/backward searching capabilities utilizing touching and pressing operations for changing processing states of the audio data stored in a permanently attached storage device; and
 - b. Zadesky et al (US Patent Application Publication 2003/0076306) disclose a portable media with processing controls responsive to rotational motion communicated through the pressure of a finger on a touch-sensitive device.

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Closing Remarks/Comments

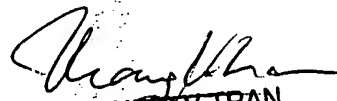
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Danielsen whose telephone number is (571) 272-4248. The examiner can normally be reached on Monday-Friday, 9:00 AM - 5:00 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nathan Danielsen
02/02/2007

ND


THANH V. TRAN
PRIMARY EXAMINER